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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/605,559

10/08/2003

Samuel Lee Miles

2558

7590

07/22/2005

Samuel Lee Miles
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Rochester Hills, MI 48309

EXAMINER

WEBB, GREGORY E

ART UNIT

PAPER NUMBER

1751

DATE MAILED: 07/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/605,559

Applicant(s)

MILES, SAMUEL LEE

Examiner

Gregory E. Webb

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Prior to examination the examiner would like to provide a working definition for the term "surfactant." A surfactant is a compound that reduces the surface tension of the diluent. The term surfactant is an abbreviated version of the phrase "surface active agent." As such the examiner will read the applicant's term "surfactant" broadly as to include any compound which

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reduces the surface tension of water. These would include partially soluble solvents as explained in the rejections below. It is therefore suggested that the applicant limit this term either by properties such as molecular weight or by functional groups. The broad use of the term surfactant will include literally billions of organic compounds including many partially soluble alcohols, glycols, and glycol ethers.

It should also be noted that water has a surface tension just over 70 mN/m at room temperature. Any reduction in this value by the addition of any compound would mean that compound would be a surface active agent.

Claim 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Vitomir (US 6,130,192).

Vitomir teaches in table 1 compositions containing 9.9% benzyl alcohol (28 mN/m), dimethyl sulfoxide (surface tension=43 mN/m), and 48.7% dipropylene glycol methyl ether (29 mN/m).

Concerning the method of immersion, Vitomir teaches the following:

Methods of applying the stripper include, but are not limited to, spraying, soaking, immersing, brushing, and the like. Preferably, the substrate to be stripped is sprayed with the stripper composition of the present invention. (see col. 4, lines 39-42)

Concerning the method of stripping, Vitomir teaches the following:

The paint stripper compositions of Examples 1-4 removed the paint from the green and blue panels without clouding or hazing the plexiglass substrate,

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while the paint stripper composition of Comparative Example 1A resulted in clouding of the plexiglass substrate. All of the paint stripper compositions removed the paint from the red panels, but left the plexiglass opaque. The inventor theorizes that the solvent of the red graffiti paint damaged the substrate upon application of the paint and, therefore, the plexiglass substrate appeared opaque even when stripped with one of the paint stripper compositions of the present invention. (see col. 5, lines 55-67)

Concerning the preferred surfactants, Vitomir teaches the following:

Suitable surfactants include, but are not limited to, cationic surfactants, anionic surfactants, zwitterionic surfactants, amphoteric surfactants, nonionic surfactants, and any combination of any of the foregoing. The surfactant enhances the water rinseability of the paint stripper composition and residue from the substrate after the paint stripping has occurred. The surfactant also acts as a cleaning agent on the substrate. Preferably, the surfactant foams when rinsing the substrate after application of the composition of the present invention. Foaming enhances penetration of the composition into the substrate resulting in more effective removal of paint and coating residues as well as dirt. Preferred surfactants include, but are not limited to, nonionic surfactants, such as alcohol ethoxylate, nonyl phenol ethoxylate, and any combination of the foregoing. More preferably, the surfactant is alcohol ethoxylate. The composition typically comprises a cleaning effective amount of surfactant.

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Preferably, the composition comprises from about 0.1 to about 3% by weight and more preferably from about 0.5 to about 1.5% by weight of surfactant based upon 100% weight of total composition.(see col. 3)

Concerning the preferred additives and the preferred substrate, Vitomir teaches the following:

Examples of suitable substrates include, but are not limited to, polymeric substrates and coatings, including, but not limited to, plastics, such as polycarbonates, polyurethanes, and polyacrylates and in particular plexiglass; concrete; masonry; wood; and glass.(see col. 4, lines 33-38)

Claim1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Miles (US 6,296,718).

Miles teaches compositions containing 1-95% fatty acid and 1-95% surfactant (see col. 2).

Concerning the high temperature conditions and the preferred time frame, Miles teaches the following:

The inventor discovered improved methods to chemically strip reject painted production parts. This method is more environmentally desirable than past art paint strip methods. This invention is 99% free of volatile organic compounds and is considered to be non-corrosive, non-caustic, non-acid, non-abrasive, non-solvent and non-regulated with the department of transportation. The invention has demonstrated excellent paint removal on steel, aluminum, brass, zinc galvanized, zinc die-cast and plated substrates. The invention will not alter metal surfaces that can sustain

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300 F. temperature from 1 to 3 hours immersion time. The composition effectively removes all current paint technologies including, not limited to the following: Electro deposition (E-Coat), Powder Technologies, Solvent and Water Based Enamels, Urethanes, Epoxy, Clear Coat Technologies. The method or process of use requires a ventilated immersion hot strip tank capable of 300 degrees Fahrenheit with adequate agitation. The composition is used as received, with no water or additives required. The invention is a unique composition that exhibits 99% free of volatile organic compounds, and is safe on aluminum, galvanized, steel and non-ferrous substrates.(see cols. 1-2)

Concerning the method of immersion, Miles teaches the following:

- b) immersing said substrate in said strip tank containing said stripping composition; and(see claim 1)

Concerning the method of stripping and the preferred substrate, Miles teaches the following:

1. A method of stripping cured paint from aluminum, galvanized steel, steel and non-ferrous substrates comprising:(see claim 1)

Claim1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Sullivan (US 5,011,621).

Sullivan teaches compositions containing 20-80% N-methyl pyrrolidone (solvent surfactant with a surface tension of 40 mN/m).

Concerning the high temperature conditions, Sullivan teaches the following:

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15. The method of claim 14 wherein the substrate and coating remover composition are allowed to remain in contact at a temperature within the range of about 20.degree. C. to 200.degree. C.(see claim 15)

Concerning the method of immersion, Sullivan teaches the following:

The compositions of this invention may be used to remove a wide variety of paints, finishes, and coatings, including, for example, alkyd enamels, acrylic enamels, polyesters, polyurethanes, epoxy resin coatings, latex paints, oil-base paints, shellacs, phenolic coatings, gum varnishes, silicone coatings, polyvinyls, polyvinyl cinnamates, polyamides, polyimides, polyalkyl acrylates, polyalkyl methacrylates, drying oils, polyvinyl acrylates, and cellulosic resins. The substrate may be of any material that is reasonably resistant to the coating remover, such as wood, glass, thermoset resin, thermoplastic resin, or metal (e.g, aluminum alloys, zinc alloys, or galvanized steel). The coated substrate may be treated with the coating remover by any suitable method, including brushing, spraying, or immersion. The treatment is most conveniently carried out at ambient temperature, but lift time may be shortened as desired by heating the coating remover and/or substrate. Temperatures of from about 20.degree. C. to 200.degree. C. are generally suitable. Lift time (i.e., the time at which the coating is released from the substrate) will typically be from about 1 minute to 60 minutes using the compositions of this invention. In some cases, actual lifting of the paint may not

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occur within 60 minutes, but the softened coating may usually be easily scraped off the substrate. After lifting, the coating and paint remover composition are removed from the substrate by any suitable means, such as mechanical action (i.e., scraping or sanding) or by rinsing with high pressure water or air.(see cols. 5-6)

Concerning the preferred surfactants, Sullivan teaches the following:

A second optional component in the coating remover compositions of the invention is a surfactant, soap, or detergent, which may be present in order to improve wetting of the coating to be removed and hasten penetration of the active components, and/or to facilitate water rinsing and water clean-up of the substrate after removal of the coating. Anionic, cationic, nonionic, or amphoteric surfactants or combinations thereof may be utilized. Preferred surfactants include, but are not limited to, polyoxyethylene derivatives of aromatic and aliphatic alcohols, (e.g., nonyl phenoxy polyoxyethylene ethanol), alkali metal salts of C.sub.8 to C.sub.22 aliphatic sulfates, (e.g., sodium lauryl sulfate), alkali metal salts of alkyl aromatic sulfonates (e.g., sodium dodecyl benzene sulfonate), dialkyl sulfosuccinates (e.g., dioctyl sulfosuccinate), and the like, and mixtures thereof. Examples of other suitable surfactants are described in Cahn et al., "Surfactants and Detersive Systems", Kirk-Othmer, Encyclopedia of Chemical Technology, 3rd Ed., (1983) Vol. 22,

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pp. 332-432, and also in McCutcheon's Emulsifiers and Detergents, 1989 North American Ed., pp. 260-284. The concentration of surfactant is not critical, but is preferably from about 0.1 to 10 weight percent of the coating remover composition. A particularly preferred range is from about 1 to 5 weight percent.(see cols. 4-5)

Concerning the preferred additives, Sullivan teaches the following:

(c) from 0 to about 50 weight percent of a cosolvent selected from the group consisting of one or more of aliphatic and aromatic hydrocarbons, terpenes, alcohols, glycols, carboxylic acids, aminoalcohols, nitriles, ethers, ketones, esters, glycol ethers, and glycol ether esters;(see claim 1)

Concerning the preferred substrate, Sullivan teaches the following:

Each of the solvent blends tested was capable of lifting a coat of alkyd paint from aluminum within about 4 minutes, and a coat of epoxy-polyamide paint from aluminum within 15 minutes.(see col. 6, lines 37-40)

Concerning the preferred time frame, Sullivan teaches the following:

Lift times in the case of stripping multiple coating layers from wood ranged from about 20 minutes to 2 hours. Even in the examples where actual lifting of the coating was not achieved, the softened coating could be easily removed by scraping.(see col. 6, lines 53-57)

Conclusion

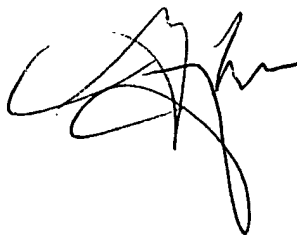
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The applicant's claims would be more likely to be allowable should the applicant more clearly and more succinctly define the most preferred surfactants suitable for their composition and methods. The applicant's list of suitable surfactants in claim 1 section a) currently does not significantly limit the claim as the first compound in the Markush group defining the surfactant is a surfactant. Should the applicant more clearly and specifically define suitable surfactant which are not taught in the prior art such claims would be allowable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory E. Webb whose telephone number is 571-272-1325. The examiner can normally be reached on 9:00-17:30 (m-f).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Gregory E. Webb
Primary Examiner
Art Unit 1751

gew